



1997 TOXICS RELEASE INVENTORY

MICHIGAN

State/TRI Data

| | |
|------------------|-----------|
| Population | 9,779,984 |
| Square Miles | 56,809 |
| Total Facilities | 904 |
| Total Forms | 3,208 |
| Form As | 375 |

| | |
|--|-------------|
| National Rank for Total On- and Off-site Releases <i>(includes transfers out-of-state for disposal)</i> | |
| Rank | 11 |
| Pounds | 85,281,920 |
| National Rank for Total On-site Releases <i>(includes quantities released at the facility; excludes quantities transferred to other sites for disposal)</i> | |
| Rank | 15 |
| Pounds | 53,067,487 |
| National Rank for Total Releases within State <i>(excludes transfers out-of-state for disposal)</i> | |
| Rank | 8 |
| Pounds | 97,423,607 |
| National Rank for Production-related Waste Managed | |
| Rank | 7 |
| Pounds | 866,093,757 |



The largest triangle appearing in the state map represents the largest facility for on-site releases in the state of Michigan. All triangles are proportionally-sized to represent the amounts of releases at each facility within this state.

Reported Releases and Waste Management Activities

| | Pounds |
|---|--------------------|
| On-site Releases | 53,067,487 |
| Air Emissions | 44,346,088 |
| Surface Water Discharges | 529,145 |
| Underground Injection Class I Wells | 5,596,855 |
| Underground Injection Class II-V Wells | 0 |
| On-site Land Releases to RCRA Subtitle C Landfills | 72,864 |
| Other On-site Land Releases | 2,522,535 |
| Off-site Releases (Transfers Off-site to Disposal) | 32,214,433 |
| Total On- and Off-site Releases | 85,281,920 |
| Recycled On-site | 378,336,073 |
| Recycled Off-site | 128,073,875 |
| Energy Recovery On-site | 83,687,074 |
| Energy Recovery Off-site | 67,480,236 |
| Treated On-site | 89,642,433 |
| Treated Off-site | 38,111,751 |
| Quantity Released On- and Off-site | 80,762,315 |
| <i>(excludes non-production-related releases; e.g. releases due to catastrophic events or remedial actions)</i> | |
| Total Production-related Waste Managed | 866,093,757 |
| Total Non-production-related Waste Managed | 304,376 |

Top Five Chemicals for Total Releases In State

| CAS Number | Chemical | On-site Releases | | | | | | Off-site Releases (Transfers Off-site to Disposal) | | | Total Releases in the State* |
|---------------|------------------------|------------------------------|--------------------------------|------------------|---------------------|---------------------------------|-----------------------------------|---|-----------------------------|-----------------------------|---------------------------------|
| | | <u>Underground Injection</u> | | | | <u>On-site Releases to Land</u> | | Transferred Into State | Transferred Within State | Transferred Out of State | |
| | | Air Emissions | Surface Water Discharges | Class I Wells | Class II-V Wells | RCRA Subtitle C Landfills | Other On-site Land Releases | | | | |
| | | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds |
| | Zinc compounds | 217,003 | 3,545 | 18,328 | 0 | 13,300 | 6,910 | 1,749,733 | 20,412,267 | 251,758 | 22,421,086 |
| 67-56-1 | Methanol | 4,329,507 | 159,984 | 4,506,256 | 0 | 0 | 6,557 | 2,326 | 640 | 4,143 | 9,005,270 |
| 1330-20-7 | Xylene (mixed isomers) | 7,141,422 | 38 | 27 | 0 | 0 | 0 | 21,020 | 4,871 | 5,102 | 7,167,378 |
| 108-88-3 | Toluene | 6,770,172 | 387 | 6,142 | 0 | 0 | 3,022 | 17,609 | 35,327 | 2,413 | 6,832,659 |
| 7439-96-5 | Manganese | 72,813 | 925 | 0 | 0 | 0 | 914,808 | 95,127 | 3,638,032 | 94,659 | 4,721,705 |

*The chemical ranking is based on the amounts in this column; these quantities exclude transfers out of state.



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Top Five Facilities for Total On-site Releases

| Facility / City, County | On-site Releases | | | | | | Total On-site Releases* | Off-site Releases (Transfers Off-site to Disposal) | |
|--|-----------------------|--------------------------|---------------|------------------|---------------------------|-----------------------------|-------------------------|---|--------------------------|
| | Underground Injection | | | | On-site Releases to Land | | | Transferred Within State | Transferred Out of State |
| | Air Emissions | Surface Water Discharges | Class I Wells | Class II-V Wells | RCRA Subtitle C Landfills | Other On-site Land Releases | | | |
| | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | | | |
| Pharmacia & Upjohn Co., Portage, Kalamazoo | 195,247 | 84,435 | 3,653,879 | 0 | 0 | 0 | 3,933,561 | 15,690 | 20,889 |
| American Tape Co., Marysville, St Clair | 3,200,046 | 0 | 0 | 0 | 0 | 0 | 3,200,046 | 250 | 1,985 |
| Holnam Inc., Dundee, Monroe | 3,147,134 | 0 | 0 | 0 | 0 | 0 | 3,147,134 | 0 | 0 |
| Warner-Lambert Co., Holland, Ottawa | 280,986 | 0 | 1,915,310 | 0 | 0 | 0 | 2,196,296 | 12,430 | 0 |
| Fibermark Inc., Rochester, Oakland | 1,617,001 | 0 | 0 | 0 | 0 | 0 | 1,617,001 | 0 | 0 |

*The facility ranking is based on the amounts in this column.

Top Five Facilities for Total Quantity Released On-site and Off-site

| Facility / City, County | Recycled On-site | Recycled Off-site | Energy Recovery On-site | Energy Recovery Off-site | Treated On-site | Treated Off-site | Quantity Released On- and Off-site* | Total Production-related Waste Managed | Total Non-Production-related Waste Managed |
|--|------------------|-------------------|-------------------------|--------------------------|-----------------|------------------|-------------------------------------|--|--|
| | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds | Pounds |
| | | | | | | | | | |
| Rouge Steel Co., Dearborn, Wayne | 0 | 3,043,300 | 0 | 0 | 0 | 0 | 13,430,800 | 16,474,100 | 0 |
| National Steel Corp., Ecorse, Wayne | 3,266,324 | 3,104 | 0 | 125 | 29,000 | 58,599 | 8,038,012 | 11,395,164 | 0 |
| Pharmacia & Upjohn Co., Portage, Kalamazoo | 0 | 0 | 135,310 | 20,439,743 | 1,359,453 | 5,344,639 | 3,955,383 | 31,234,528 | 8,168 |
| American Tape Co., Marysville, St Clair | 14,106,716 | 0 | 0 | 0 | 0 | 63,860 | 3,202,330 | 17,372,906 | 0 |
| Holnam Inc., Dundee, Monroe | 0 | 0 | 0 | 0 | 0 | 0 | 3,147,134 | 3,147,134 | 0 |

* The facility ranking is based on the amounts in this column; these quantities exclude non-production-related releases.

For More Information...

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